Figure 1: Overall Configuration of SAN Infrastructure on Demand (SIoD) Service System

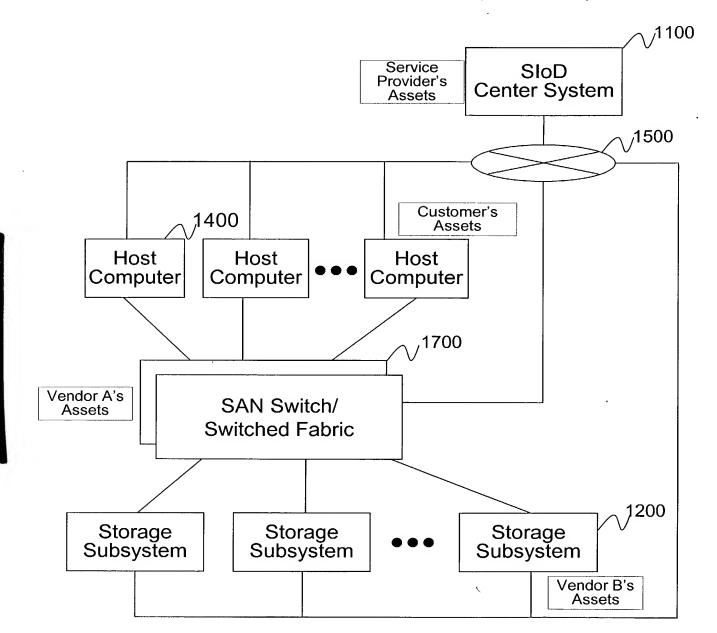


Figure 2: Configuration of SloD Center System 1100

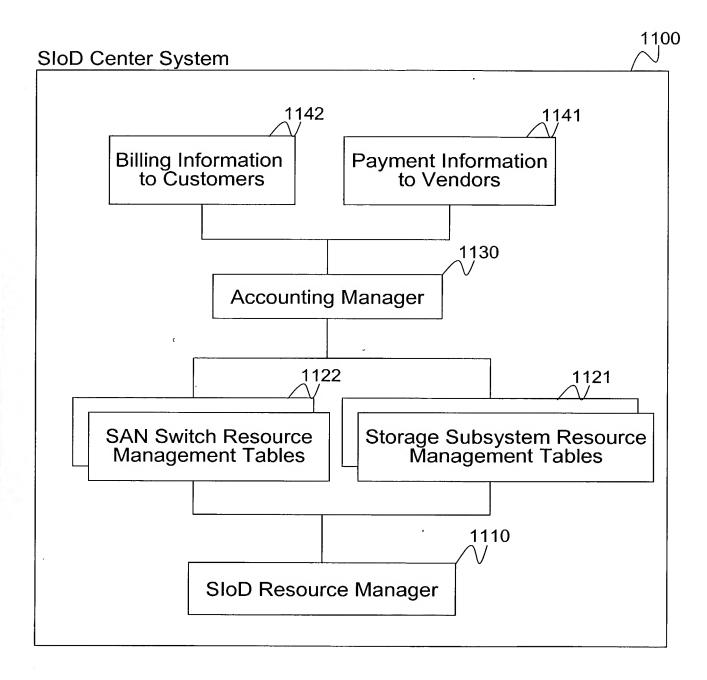


Figure 3: Configuration of Host Computer 1400

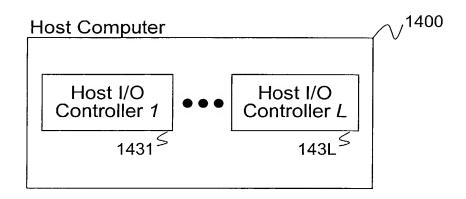


Figure 4: Configuration of SAN Switch 1700

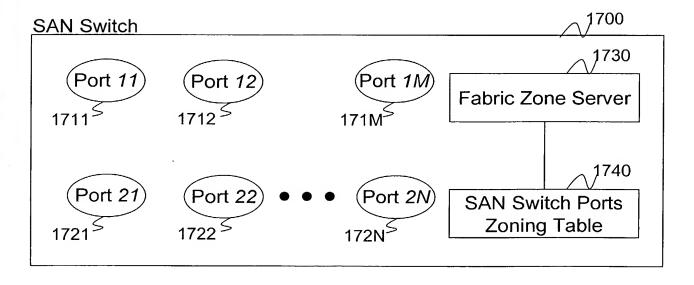


Figure 5: Configuration of Storage Subsystem 1200

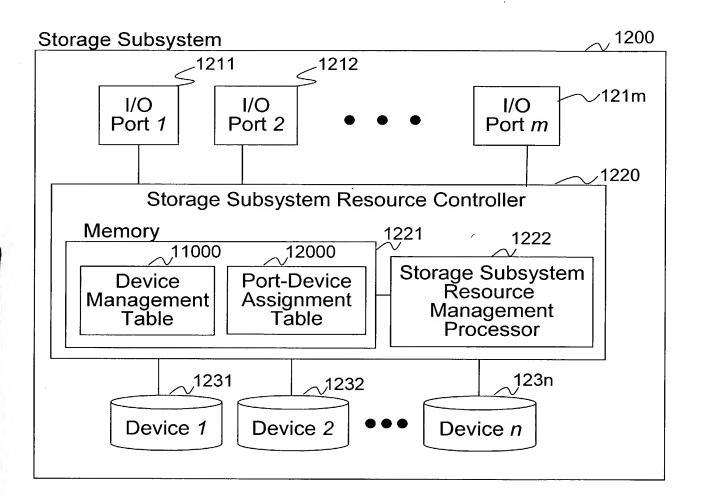


Figure 6: General Processing Flow of SloD Center System 1100

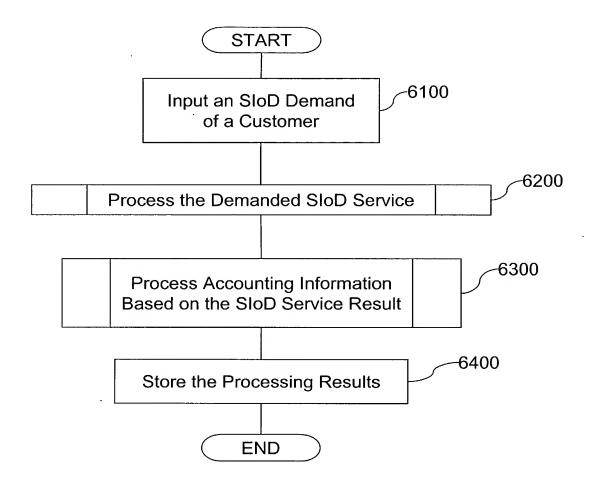


Figure 7: GUI of SIoD Demand Input (Before SloD) Host Computer 1002 [Legend] Host I/O Host I/O

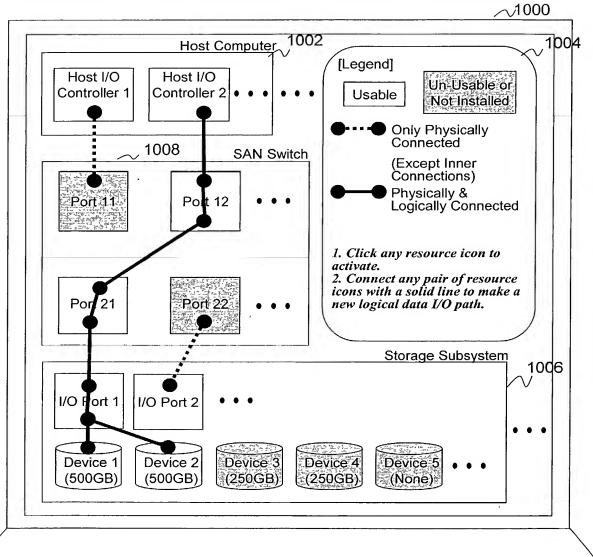


Figure 8: GUI of SloD Demand Input (After SloD)

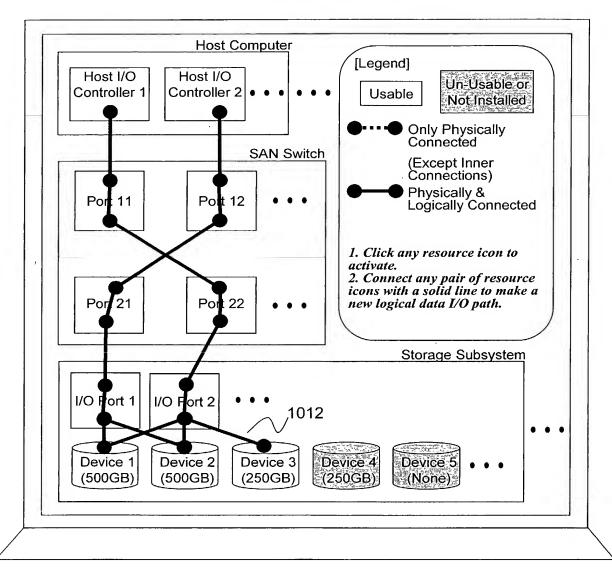


Figure 9: Detailed Processing Flow of Step 6200

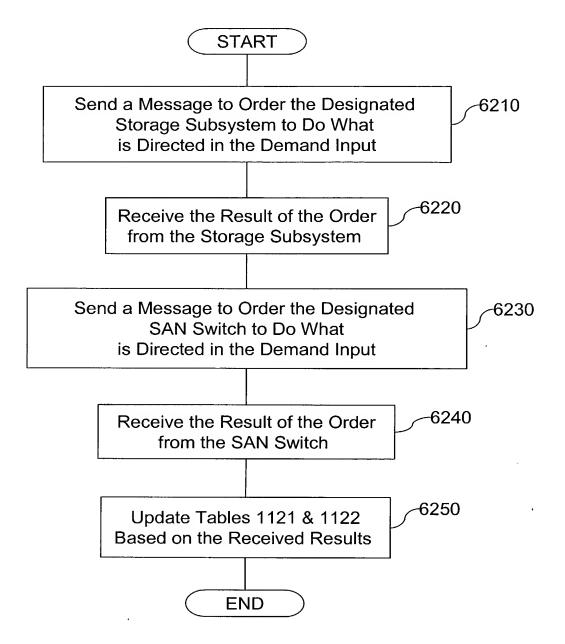


Figure 10: Processing Flow of Storage Subsystem Resource Management Processor 1222

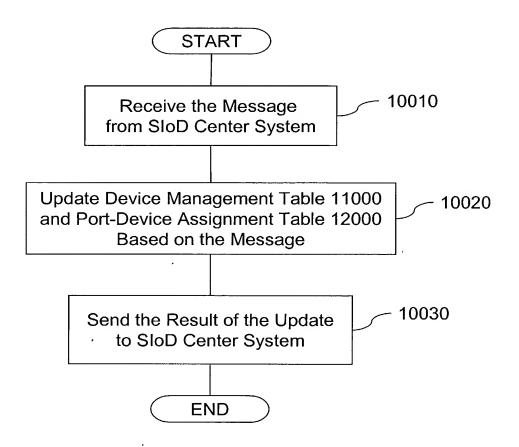


Figure 11: Device Management Table 11000 (Before SloD Demand Processing)

_110 ≤	10 <u>11020</u>	<sub>2</sub> 11030	<sub>&lt;</sub> 11040	11050	<sub>≤</sub> 11000
Device No.	Customer ID	Installation Status	SoD Status	Size	
1	676851011	Installed	Usable	500 GB	
2	676851011	Installed	Usable	500 GB	
3	N/A	Installed	Un-Usable	250 GB	
4	N/A	Installed	Un-Usable	250 GB	
5	N/A	Not Installed	Un-Usable	N/A	
		•			-
n	N/A	Not Installed	Un-Usable	N/A	

Figure 12: Device-Port Assignment Table 12000 (Before SloD Demand Processing)

1201 	0 12020  ≤	<sub>2</sub> 12030	_12000 ≤	
I/O Port ID	Installation Status	Device No.	T	
1211	Installed	1, 2	]	
1212	Installed	None	]	
1213	Not Installed	N/A	1	
•				
121m	Not Installed	N/A		

## Figure 13: Device Management Table 11000 (After SloD Demand Processing)

	_110 ≤	10 <sub>≤</sub> 11020	<sub>2</sub> 11030	<sub>&lt;</sub> 11040	11950	<11000
De	vice No.	Customer ID	Installation Status	SoD Status	Size	
	1	676851011	Installed	Usable	500 GB	
	2	676851011	Installed	Usable	500 GB	
	3	676851011	Installed	Usable	250 GB	
	4	N/A	Installed	Un-Usable	250 GB	
	5	N/A	Not Installed	Un-Usable	N/A	
			•			-
	n	N/A	Not Installed	Un-Usable	N/A	

Figure 14: Device-Port Assignment Table 12000 (After SloD Demand Processing)

	12020 S	_12030 <	<12000
I/O Port ID	Installation Status	Device No.	
1211	Installed	1, 2	1
1212	Installed	1, 2, 3	]
1213	Not Installed	N/A	]
	•		_
121m	Not Installed	N/A	

Figure 15: Processing Flow of Fabric Zone Server 1730

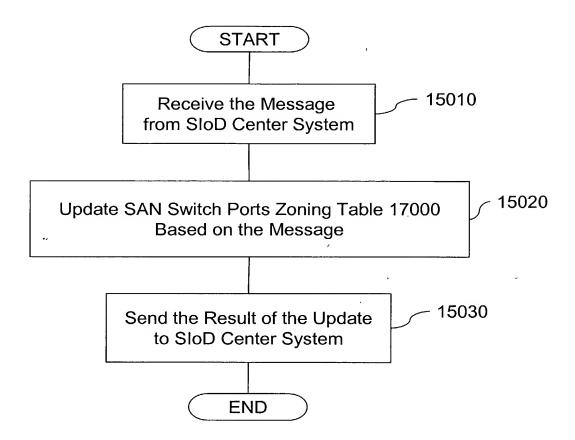


Figure 16: An Example of Changing Zone Setting

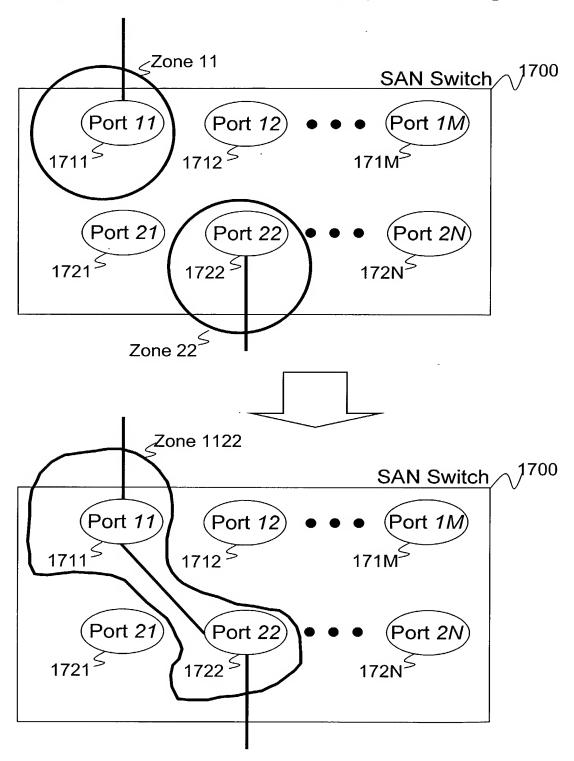


Figure 17: An Example of SAN Switch Ports Zoning Table 17000 (Before SloD Demand Processing)

	17020	17030	17000
SAN Switch	Connected Device ID	Connected Ports IDs	
Port ID	outside SAN Switch	inside SAN Switch	
1711	Host I/O Controller: 1431	None (Isolated)	
1712	Host I/O Controller: 1432	1721	
	• • •		
1721	I/O Port: 1211	1712	·~
1722	I/O Port: 1212	None (Isolated)	
	• • •		

Figure 18: An Example of SAN Switch Ports Zoning Table 17000 (After SloD Demand Processing)

	0 /17020	17030	17000
SAN Switch	Connected Device ID	Connected Ports IDs	
Port ID	outside SAN Switch	inside SAN Switch	
1711	Host I/O Controller: 1431	1722	
1712	Host I/O Controller: 1432	1721	
	• • •		
1721	I/O Port: 1211	1712	
1722	I/O Port: 1212	1711	
	• • •		

Figure 19: Detailed Processing Flow of Step 6300

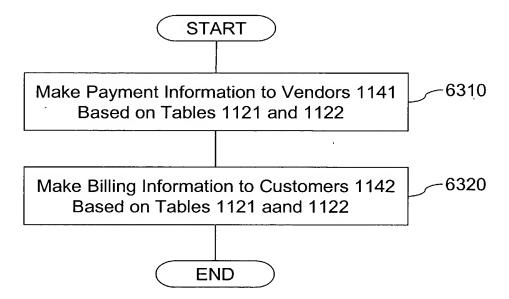


Figure 20: An Example of Billing Information to Customers

20010		20020		20000
Customer	SAN Infrastructure	Resources	Total	
ID	No. of SAN Switch Ports	Storage Capacity	Price	
676851011	4	500 GB	\$200K	
	• • •			
	20021	20022	20030	-

Figure 21: An Example of Payment Information to SAN Switch Vendors

21010	21020	21030	21000
SAN Switch Vendor ID	Total No. of Ports	Total Price	,
02764995	78	\$840K	
	• • •	,	

Figure 22: An Example of Payment Information to Storage Subsystem Vendors

22010	22020	22030	22000
Storage Subsystem Vendor ID	Total Storage Capacity	Total Price	
03186390	738,000GB	\$6,300K	
	• • •		